



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
CINCINNATI PROCUREMENT OPERATIONS DIVISION
CINCINNATI, OHIO 45268

SUBJECT: Request for Task Order Proposal, Tracking Number PR-OW-18-00419

FROM: Angela Lower
Contracting Officer

TO: Multiple Award Contract Holders under TSAWP II

Attached is request for task order proposal for the subject tracking number which is issued for competition for the project entitled, "Technical Support for Nonpoint Source Load Reduction Models".

The government requests you prepare a proposal (cost and technical) for the task order. The proposals shall be submitted to lower.angela@epa.gov by Noon ET on September 6, 2018. The technical proposal is limited to eighteen (18) pages. Cost Proposals shall be provided in accordance with Contract Clause B-1 as supplemented by the attached cost proposal instructions. Proposals shall also include the required conflict of interest certification.

The following documents provided for this solicitation will become part of the Task Order Award:

- Performance Work Statement
- Task Order Clauses

Award of a Cost Plus Fixed Fee – Term Type Level of Effort task order will result. The period of performance for this Task Order is for a base period of approximately 10 months and four 1-year option periods with an anticipated start date of Oct 1, 2018 Please see attached technical evaluation criteria which will be used to evaluate the offer. Award will be made on a Best Value Tradeoff basis, where technical quality is more important than cost.

Any questions should be directed to lower.angela@epa.gov within five days of issuance of this Solicitation.

A handwritten signature in cursive script that reads "Angela Lower".

08/20/2018

Angela Lower
Contracting Officer

Cc:

Damon Highsmith, CL COR

Chris Laabs, Alternate CL COR

Don Waye, TO COR

Cynthia Curtis, Alt. TO COR

Lisa Mitchell-Flinn, Contract Specialist

Attachments:

Performance Work Statement

Task Order Clauses

Cost Proposal Instructions

Technical Evaluation Criterion

**PERFORMANCE WORK STATEMENT
TSAWP2 Contracts Task Order Solicitation
PR-OW-18-00419**

Technical Support for Nonpoint Source Load Reduction Models

A. BACKGROUND:

Beginning in FY 2002, Clean Water Act Section 319(h) grant funded projects were required to report estimates of load reductions in nitrogen, phosphorus, and sediment. To assist states in estimating these load reductions, EPA, with the help of contractor support, developed two load reduction models: Spreadsheet Tool to Estimate Pollutant Loads (STEPL) and Region 5. The load reductions estimated in these models are transferred into the Section 319 Grant Reporting and Tracking System (GRTS), a database located on a secure, nonpublic server. The models, supporting documentation, and an input data server for STEPL are available via <https://www.epa.gov/nps/data-models-and-other-technical-resources-watershed-approach#models>. The model is currently being transitioned to EPA web space, so some links exit EPA's website; once the transition is complete, the former site will provide a link to the new one.

Because the user community for these models is comprised mostly of state nonpoint source program managers rather than professional modelers, STEPL and Region 5 models were developed to provide estimates of nonpoint source load reductions within the framework of a simplified user environment relative to other models with similar capabilities. STEPL estimates nutrient and sediment reductions on a watershed basis, and is somewhat more complex than the Region 5 model. STEPL creates a customized spreadsheet-based model in Microsoft Excel and uses an online data input server which uses ArcGIS Viewer for Flex. STEPL also uses a utility called BMP Calculator to estimate combined efficiency of multiple BMPs (a network of BMPs which are parallel and/or in-series to each other) within the same land use category. The Region 5 model is an Excel workbook which provides a gross estimate of sediment and nutrient load reductions from the implementation of agricultural and urban BMPs. The Region 5 model does not estimate reductions on a watershed level. It is used primarily by the states in EPA Region 5.

Additionally, in 2012, a prototype was developed for a Web-based version of STEPL which was functional at the time, but never released for widespread public use. Although this version is no longer functional, it contains components that are useful to, and usable for, an updated Web-based version of STEPL for public use.

Regarding Task 3 (User Support for STEPL and Region 5 Models): These two models have existed for many years, primarily to support state nonpoint source program managers tasked with reporting on annual nonpoint source load reduction estimates associated with installation of best management practices (BMPs) which are supported by Clean Water Act Section 319 funding. Annual reporting on these load reduction estimates is required by statute and supported by EPA's WQ-09 national water program measure. As state nonpoint source program managers are

typically not professional water quality modelers, there is a need to maintain an active user support system, including a help desk, to support this work.

Regarding Task 4 (Support for Modifications to STEPL Load Reduction Model): Although the current version is significantly improved over the earliest release of STEPL, there remains a need to refine the model. At best, STEPL is only as accurate as its assumptions, and EPA continues to refine its assumptions on the pollutant removal efficiencies of various nonpoint source BMPs available for use in the model, and continues to expand STEPL's BMP toolbox to better comport with evolving technologies and practices in the field. STEPL's feature list continues to grow to better meet users' needs and expectations.

Regarding Task 5 (Support for STEPL User Training and Model Documentation): STEPL attracts new users, many of whom have recently joined state nonpoint source programs or have recently taken on oversight of CWA section 319 grant workplans, so there continues to be a need for trainings. As STEPL's feature set and capabilities evolve, so to must the model's documentation and training resources.

Regarding Task 6 (Support for Development of Web-based Version of STEPL Model): EPA has committed to completing the development of a Web-based version of STEPL, began under a previous task order and work assignment. The future is in Web-based applications, not local device-specific software code. This will allow portability and inter-operability, as well as a cleaner, more intuitive interface and an improved user experience overall.

B. TASKS

Task 1 – Quality Assurance/Quality Control

Quality Assurance (QA) is an important component of EPA's work to assure that minimum quality standards are attained. The contractor shall follow the Quality Management Plan (QMP) that has been customized and incorporated into this TSAWP-2 contract. In addition, the contractor shall document the processes for Quality Assurance that it will follow for the tasks under this task order. EPA policy requires that an approved Quality Assurance Project Plan (QAPP) be in place before any work begins that involves the collection, generation, evaluation, analysis or use of environmental data. For this task order, Tasks 4 and 6 require a QAPP; Tasks 2, 3, and 5 do not. The QAPP must be consistent with the guidance document *EPA Requirements for Quality Assurance Project Plans* (www.epa.gov/sites/production/files/2016-06/documents/r5-final_0.pdf).

1.1 – Within seven (7) business days after the task order award, the contractor shall prepare and submit for EPA review a draft Quality Assurance Project Plan (QAPP) documenting how quality assurance (QA) and quality control (QC) will be applied to the generation, collection, evaluation, analysis and use of environmental data. EPA will review the contractor's draft QAPP and provide the contractor with written approval or written comments. The contractor shall write the QAPP using the active voice. The QAPP shall provide enough detail to clearly describe objectives of the project supported by the task order; the type of data to be collected, generated,

or used under this task order to support the project objectives; the quality objectives needed to ensure that these will support the project objectives; and the quality assurance and quality control activities to be performed to ensure that any results obtained are documented and are of the type, quality, transparency, and reproducibility needed.

1.2 – The contractor shall submit a revised QAPP within six (6) business days of receipt of the written comments from EPA on the draft QAPP, unless otherwise instructed by the EPA TOCOR. **Under no circumstances shall work that involves the generation, collection, evaluation, analysis, or use of environmental data be performed until the contractor receives written notification from the EPA TOCOR that EPA has approved the contractor's QAPP.** Any non-sampling/non-analytical work that involves the generation, collection, evaluation, analysis, or use of environmental data that is initiated prior to EPA approval of the contractor's QAPP must be performed in accordance with the approved QAPP. EPA may request the contractor to furnish written documentation from the contractor showing that the contractor has complied with this requirement.

All QA documentation, including the QAPP, prepared under this task order, shall be considered non-proprietary, and shall be made available to the public upon request.

Additional QA Documentation Required

1.3 – In addition to the QAPP requirements described above, for all major deliverables (e.g., technical support documents, study reports, study plans, etc.) produced by the contractor under this task order, a discussion of the QA/QC activities that were or will be performed to support the deliverable must accompany the deliverable. For model documentation, fact sheets, and reports that rely exclusively on secondary data, these can be in separate documents, rather than embedded in the deliverables themselves. This shall be at the TOCOR's discretion, not the contractor's.

The contractor shall immediately notify the TOCOR of any QA problems encountered that may impact the performance of this task order, with recommendations for corrective action. (See Task 2.4.)

1.4 – The contractor also shall provide EPA with monthly status reports of QA-related activities performed during implementation of this task order. These monthly QA reports shall identify QA activities performed to support implementation of this task order, problems encountered, deviations from the QAPP, and corrective actions taken. If desired, the contractor may include this as a part of the contract-required monthly financial/technical progress report.

1.5 – If, during the Period of Performance of this task order, the TOCOR provides technical direction that revisions to the QAPP are determined to be necessary, the contractor shall submit a revised QAPP, including the revision summary, within seven (7) business days after receiving written technical direction to do so. When preparing this draft revised QAPP, the contractor shall ensure that it is written in an active voice, changes are presented in a track changes version of MS Word, and shall include a version history page that summarizes changes made. The contractor also shall provide EPA with copies of any modified SOPs or checklists. EPA will

review the draft revised QAPP and provide the contractor with written approval or comments. The contractor shall provide a final QAPP that responds to EPA's written comments within six (6) business days of receipt of EPA's comments on the draft revised QAPP.

Task 2 – Communications

2.1 – Prior to beginning work on this task order (other than to develop the QAPP), or any significant modification to this PWS, the TOCOR shall schedule a kickoff meeting with the contractor to discuss the tasks within this task order, the goals of the task order, and to review the schedule of milestones and expectations. The contractor shall participate in a kickoff meeting with the TOCOR either in person or via conference call to discuss the following: points of contact, roles and responsibilities, Quality Assurance protocols, timelines, the schedule of benchmarks, milestones and deliverables, establish dates and time for monthly calls, and monthly technical progress reports and general task order administrative information. The contractor shall not incur any additional billable costs other than those related to Tasks 1, 2 and 3 until receipt from TOCOR of written notification that EPA's Quality Assurance Officer has accepted the QAPP.

2.2 – The contractor shall coordinate and set up regular status discussions (at least monthly) between the TOCOR and any other relevant parties to discuss the status and progress of the work under this task order. The contractor shall participate in these discussions, which may either be in person or via phone, if in-person communication is not convenient for either party. The frequency of these discussions may be modified based on project status at the request of the contractor and only as approved by the TOCOR. The contractor shall provide the TOCOR with one-week notice of any scheduled status calls. All status discussions will take place during normal business hours: 8:30AM to 5PM Eastern Time.

The contractor shall provide meeting summaries after each status discussion within five (5) business days in draft form for the TOCOR to review. If necessary, the TOCOR will provide any edits and/or comments on the meeting summaries to the contractor within five (5) business days of receipt of draft summaries. The contractor shall address any relevant edits, finalize the summaries and provide them to the TOCOR within five (5) business days after receipt of edits or comments from the TOCOR. If no edits or comments are provided by the TOCOR, the draft written summary will constitute the final summary.

2.3 – The contractor shall provide monthly progress reports on the status of all tasks in this task order. These progress reports shall meet the requirements of PWS Section D: **Reporting**, as well as the QA documentation requirements specified in Task 1.4.

2.4 – The contractor shall notify the TOCOR of any problems, delays or questions as soon as they arise, including immediate notification of any quality assurance issues. Problems, delays, or significant questions should be brought to the attention of the TOCOR in real time, but in any case, not later than three (3) business days after they arise. This notification may be sent by phone or email, but if transmitted by phone, the contractor shall send a follow-up email to the TOCOR within three (3) more business days, describing the problem.

2.5 – In the event that not all expected deliverables identified in this task order are accepted by the TOCOR as completed and finalized prior to the expiration date of this task order, the contractor shall furnish all draft deliverables and any associated working materials needed for the completion of this work to the TOCOR prior to the expiration date of this task order.

TASK 3 – User Support for STEPL and Region 5 Models

3.1 – The contractor shall provide technical support for user questions via email and phone on the STEPL and the Region 5 Nonpoint Source Load Reduction Model (Region 5 Model). The contractor shall strive to respond to each question sent to the Help Desk email box and phone support within three business days; responses can be in the form of phone calls or emails, at the contractor's preference. Any phone response shall be followed up with an email that summarizes the response within three days of the response call. When the three-day response time cannot be met, the contractor shall notify the TOCOR and confer to determine an alternative response time. Generally, the contractor shall be available to users during normal business hours, 8:30AM to 5PM Eastern Time, and may use his or her usual work phone number. Returning calls is acceptable. The contractor shall identify him/herself on the phone as an EPA contractor.

The contractor shall answer technical questions about the models only, not programmatic or policy questions. Policy or program questions shall be referred to the TOCOR. The contractor shall keep an electronic record of all questions and responses and shall submit this record to the TOCOR as a part of the monthly report (see Section D. Reporting). The contractor shall copy the TOCOR on all responses to users.

3.2 – Within five business days from the start of this task order, the contractor shall provide to the TOCOR a list of staff assigned to co-administer EPA's electronic discussion list, STEPL, that will assure year-round support during regular federal work days (eight hours/day Mon-Fri, excluding federal holidays). EPA staff will share co-administration duties with the contractor, as needed. The purpose of this list, which relies on EPA's Lyris list management platform, is to provide an open forum for the posting and discussion of news and information relating to EPA's STEPL Model. The contractor shall provide primary ongoing routine technical support as needed (but not later than 3 business days from request for support) to administer and maintain EPA's STEPL electronic discussion list, which functions as a STEPL user group. Note that maintenance of this list is largely automated and that EPA has primary responsibility for handling non-routine issues that come up with this list. Routine duties include monitoring list postings for appropriateness, handling requests to subscribe and unsubscribe, and flagging issues that require EPA intervention. The contractor shall also monitor and contribute as appropriate to the STEPL User Group via EPA's Lyris List Manager Discussion List. As of June 2018, the list has 84 members and posts are rare (less than 1/week). For budgeting purposes, the LOE required for this task is anticipated to be no more than 1 hour/week on average for the duration of this task order (base + 4 option periods). The TOCOR or a designee will provide the necessary training to perform all necessary list management duties at the start of this task order period; this training will last about an hour.

Since 2015, uncredentialed contractors have been restricted from accessing the administrative functions of the Lyris ListManager software that STEPL relies on; however, EPA's list administrators (including the TOCOR) have this access. For the purposes of this task order, credentials by the contractor are not required.

TASK 4 – Support for Modifications to STEPL Load Reduction Model

For the purpose of estimating level of effort (LOE) for this task, the contractor shall assume average monthly LOEs for each option period at 75% of the base period LOE. For all subtasks under Task 4, the contractor shall designate a project coordinator to keep this task organized and running smoothly, and specifically to proactively ensure that subtasks are completed in a timely manner and with the proper coordination of relevant parties. The contractor's project coordinator shall steer the parties (EPA staff and potentially others) along critical paths that serve to meet the goals and objectives of this task within the constraints of his or her authority (e.g., EPA staff has a separate management structure).

4.1 – The contractor shall integrate the functions of the separate BMP calculator tool into STEPL's *CombinedBMPEfficiency* worksheet for the purpose of allowing users the option to apply BMPs in series on a watershed, and not just in parallel. The contractor shall deliver for EPA review a beta version of STEPL by the end of Month 4 in the base period. The TOCOR intends to provide feedback on the beta feature within 30 days after the contractor has submitted this beta. The contractor shall finalize and deliver to EPA a version of STEPL with this feature within 30 days of receiving EPA feedback on the beta version. The contractor shall deliver the 10-watershed version of the STEPL spreadsheet model. The contractor shall give this deliverable a new model version number such as version 4.4b.

4.2 – During the base period, the contractor shall improve Excel's Run Solver functionality in STEPL's Combined BMP Calculator sheet for the purpose of allowing model users the ability to optimize which combination of practices within a watershed could meet a load reduction target. The current version (4.4) of the customized spreadsheet model (STEPL10ws) has an optimization algorithm that solves for agricultural BMPs only, and the user must enter a selection of BMPs for the optimizer to use in the solution. The optimizer is intended to maximize the load reduction and minimize the treated land use area based on the suite of BMPs provided by the user. The contractor shall improve the functionality of the optimizer by including "Add Run Solver" functionality to the *CombinedBMPEfficiency* worksheet. This would allow the user to optimize specific combinations of practices within a watershed that meet a user-provided load reduction goal. In addition, the contractor shall provide an assessment of the feasibility and LOE needed to add a user defined cost field for user-selected BMP so that users have the option of performing cost optimizations via the Run Solver. Other potential improvements include: allowing the optimizer to be applied to non-agricultural land uses; suggesting various BMP combinations that produced the optimized results; and determining optimized solutions that minimize the land area served by BMP combinations. The contractor shall deliver for EPA review a beta version of STEPL with feasible solutions by the end of Month 7 in the base period. The TOCOR intends to provide feedback on the beta feature within 30 days after the contractor has submitted this beta. The contractor shall finalize and deliver to EPA a version of STEPL with this feature within 30 days of receiving EPA feedback on the beta version. The contractor shall deliver the 10-watershed version of the STEPL spreadsheet model and, if

technically feasible, an installation package for users to set up this improved version of STEPL with a customized number of watersheds, and shall also deliver an updated user's guide that explains the new functionality. The contractor shall give this deliverable a new model version number such as version 4.4c or 4.5.

4.3 – Barring any technical issues or logical reasons to the contrary, the contractor shall update the Region 5 Model to include all of the default BMP types available in STEPL version 4.4 and deliver it to EPA by the end of base period Month 6. In the event of technical issues or logical reasons that prevent this update, the contractor shall discuss them with the TOCOR and EPA's technical lead for STEPL, and a joint decision will be made on how to proceed with the update. The contractor shall document any such decision and outcome and deliver the documentation to the TOCOR. The contractor shall also update the Region 5 Model fact sheet (at http://it.tetrattech-ffx.com/steplweb/STEPLmain_files/UpdatestoRegion5Model.pdf), as needed. The contractor shall give this deliverable a new model version number.

4.4 – During the base period, the contractor shall work with EPA to provide technical support for improving the BMP load reduction efficiency values used by STEPL. This technical support may be used to assist EPA in the development, refinement or implementation of a standardized procedure for determining load reduction efficiencies for phosphorus (P), nitrogen (N), and sediment for BMPs included, or proposed to be included, in STEPL. The contractor's project coordinator shall work with EPA to develop or refine this standardized procedure, although EPA is responsible for accepting or modifying any draft procedure proposed by the contractor. The standardized procedure shall:

- balance appropriateness and real-world field rigor of BMP efficiency values with efficient/streamlined level of time and effort;
- consider the appropriate role of literature reviews, including grey literature and research sources, as well as consideration of geography, climate, local site conditions and any other factors relevant to the targeted user community in the United States;
- consider whether to accommodate ranges of efficiency values (e.g., low, median and high) in the STEPL Model, and, if so, how to best accommodate these ranges;
- provide recommendations on how to handle significant figures when determining/improving load reduction efficiency values for BMP and LID practices, not just as model inputs, but also as they relate to model outputs and model-generated reports.

Based on the TOCOR's technical direction, EPA may request that the contractor produce a draft and final report that explains the procedure and outlines the steps in detail. In this case, the contractor's project coordinator shall:

- work with the TOCOR to set a schedule to produce a draft and final report in a reasonably expeditious time frame;
- produce a complete draft within 5 months of the date of this request, at the latest;

- revise and finalize the draft report within 30 days of receiving feedback from EPA provided via the TOCOR.

In this event, the TOCOR intends to provide this written feedback to the contractor within 45 days of receiving the contractor's draft report.

4.5 – Based on the TOCOR's technical direction, EPA may request that the contractor assist EPA in applying any standardized procedure developed under the previous subtask to determine load reduction efficiency values for BMPs in STEPL in batches by category. One priority category is the 15 Agricultural Pastureland BMPs that are currently in STEPL v. 4.4. Another priority category is the numerous LID practices represented in STEPL v. 4.4.

As part of the effort to improve the rigor of the BMP efficiency values in STEPL, EPA is building a separate BMP efficiency database which is being populated with information on the BMPs available for use in STEPL, or under consideration for inclusion in STEPL, primarily from published literature sources. When conducting work under this task, the contractor shall support the use of this database where appropriate, and may be asked to evaluate references for suitability and whether additional references are needed for specific BMPs.

If this task is activated, the contractor shall propose a schedule to the TOCOR to applying the procedure to each BMP category in a reasonably expeditious timeframe, but within 6 months of the date of this request, at the latest.

4.6 – The contractor shall update STEPL and the BMP Calculator by the end of the base period with any EPA-approved recommendations to the Model that arose from Tasks 4.1 through 4.4 and any bug fixes that were uncovered during the first 10 months of the base period. By the end of the base period, the contractor shall update the model documentation and any associated Help files as necessary. The contractor shall supply the TOCOR with an MS Word version of the updated document. The contractor shall deliver 508-compliant PDF files of any revised documentation or Help files within two weeks after receiving review and approval from the TOCOR.

4.7 – For the base period and each applicable Option Period, the contractor shall update the spreadsheet version of STEPL, as necessary, to make it compatible with the latest public version of Microsoft Excel. The contractor shall create an updated standalone executable file of the Model that can accommodate up to 10 watersheds. Additionally, the contractor shall create an installation package of the STEPL model that includes all necessary files, including documentation/Help files. The contractor shall deliver these products to the TOCOR for uploading to the STEPL website.

4.8 – During Option Period 1, the contractor shall review the list of BMPs in STEPL against the most commonly selected BMPs listed in the Grants Reporting and Tracking System (GRTS: www.epa.gov/nps/grts) and shall recommend possible additions and deletions to STEPL. EPA will provide the contractor with the list of BMPs from GRTS. The contractor shall produce a list of recommended BMP additions and deletions for STEPL by the end of Month 6 of Option Period 1.

4.9 – By the end of option period 1, the contractor shall develop a white paper that presents the pros and cons of enhancing STEPL for performing estimates of bacteria loads from various land use combinations and bacteria load reduction estimates from various BMP types. The white paper shall include a recommendation either for or against adding these capabilities and a rationale that defends this recommendation. If the contractor recommends the addition of these capabilities, the white paper shall include information on the level of effort (cost, resources and timeline) needed to implement the new capabilities.

4.10 – The contractor shall provide any and all deliverables in electronic formats that are supported by EPA. This includes the Visual Basic interface, which shall be made available to EPA upon request.

TASK 5 – Support for STEPL User Training and Model Documentation

For all subtasks under Task 5, the contractor shall designate a project coordinator to keep this task organized and running smoothly, and to proactively ensure subtasks are completed in a timely manner and with the proper coordination of relevant parties. The contractor's project coordinator shall steer the parties along critical paths that serve to meet the goals and objectives of this task within the constraints of his or her authority (e.g., EPA staff has a separate management structure).

5.1 – The contractor shall conduct up to 2 webinar trainings per year on the STEPL model and/or the Web-based version of STEPL currently under development (see Task 6) and how it works to an audience comprised of nonpoint source staff or watershed practitioners from states, localities, NGOs and/or EPA Regions. For budgeting purposes, the contractor shall plan on conducting 1.5 such training per year. The trainings will cover a basic overview of the model components, including any significant new capabilities. In consultation with EPA, the contractor shall propose training dates at least 8 weeks in advance of each webinar. The contractor shall provide to the TOCOR and EPA's technical lead for STEPL any draft PowerPoint presentation 6 business days in advance of the training and shall consider feedback received from the TOCOR and/or EPA's technical lead for STEPL within 3 or more days in advance of the training. The contractor shall provide to the TOCOR within 5 business days of each training any final PowerPoint presentations and a list of recommendations and/or issues regarding the STEPL model that were received or discussed at the trainings. The contractor shall create an audiovisual archive of each webinar training to EPA that is 508-compliant and in a format supported by EPA's STEPL website that does not rely on proprietary software. The contractor shall post the final version of the training PowerPoint presentation(s) on the STEPL website for public viewing at least a day prior to the training date itself.

5.2 – At the receipt of the TOCOR's technical direction, the contractor shall be available to conduct up to one live (in-person) training per year on the STEPL model (and/or the forthcoming Web-based version of STEPL) and how it works, likely for an audience comprised of nonpoint source staff from states and EPA Regions and potentially local 319 subgrant recipients. For some years there may be no in-person trainings, however, the contractor shall budget for one such

training per biennium. All training locations shall be within 30 miles of any major U.S. city served by at least three commercial airlines. The trainings will last 2-4 hours and will cover two sessions: a basic overview of the model components, and a session for participants to try using the tools themselves. The TOCOR will work with the contractor to manage and provide oversight of any in-person trainings. The TOCOR will notify the contractor at least 90 days in advance of each training of the training location and venue. For budgeting purposes, the contractor shall plan on conducting 3 such training over 5 years.

The contractor shall ensure that the trainings cover a basic overview of the model components and a “hands on” component during which time participants will be able to try using the tools themselves. When new features are introduced into the model, the contractor shall modify example datasets or add new ones to demonstrate these new capabilities. For overview presentations in classrooms, the contractor shall provide to the TOCOR and EPA’s technical lead for STEPL any draft PowerPoint presentation 6 business days in advance of the training and shall consider feedback received from the TOCOR and/or EPA’s technical lead for STEPL within 3 or more days in advance of the training.

The contractor shall provide to the TOCOR within 5 business days after each training a copy of any final PowerPoint presentation used in the training (in both .PPT format and as a 508-compliant .PDF format), the final versions of any example datasets, and a list of recommendations and/or issues regarding the STEPL model that were received or discussed at each training.

5.3 – During the base period, the contractor shall review, reorganize and update the BMP Definitions document for STEPL and the Region 5 Model. The contractor shall:

- organize the specific BMPs described in this file by land use type to improve clarity with regard to its use as a reference for STEPL’s “BMPList” tab;
- align the BMP Definitions document with the actual default BMPs available in the most recent version of STEPL and ensure that all BMPs defined in this file correspond with the BMP names provided in STEPL. This entails adding entries to the BMP Definition file for many of the LID practices represented in STEPL and the newly-added pastureland BMPs;
- reconcile any discrepancies in the names of these BMPs. In some cases, this may mean that the contractor will recommend to EPA simplifications or clarifications of the names of BMPs listed in STEPL and the Region 5 Model;
- review all photos and diagrams of BMP types for clarity of purpose and digital resolution, and provide substitutes or improvements to them where recommended;
- review which BMPs could benefit from photos/diagrams where none exist, and provide them where appropriate;
- review all BMP descriptions for accuracy, clarity and consistent level of detail and provide improvements where appropriate.

By the end of base period Month 6, the contractor shall deliver the draft updated BMP Definitions document to EPA as a Microsoft Word file that shows all edits as “track changes” and shall also provide a clean version in Word. The contractor shall finalize the draft BMP Definitions document within 3 weeks of receiving final feedback from the TOCOR, including feedback on simplifying or clarifying BMP names. The TOCOR intends to provide feedback on the draft file within 45 days after the contractor has submitted it to EPA. The contractor shall deliver the final file in the form of a 508-compliant PDF and a corresponding Microsoft Word file.

5.4 – During the base period, the contractor shall assist EPA as needed to migrate the current website for STEPL and the Region 5 Model to EPA server space.

5.5 – During Option Period 1, the contractor shall develop and deliver to EPA a user’s guide for the Region 5 Model. This guide shall be a comprehensive replacement and update of the Michigan DEQ training manual originally from 1999 (and last updated in 2005), available here: http://it.tetratex-ffx.com/steplweb/STEPLmain_files/Region5manual.pdf. The contractor shall deliver a draft guide to EPA in Microsoft Word format by the end of Month 6 in Option Period 1.

The contractor shall finalize the draft user’s guide for the Region 5 Model within 30 days of receiving final feedback from the TOCOR. The TOCOR intends to provide feedback on the draft file within 45 days after the contractor has submitted it to EPA. The contractor shall deliver the final file in Microsoft Word and as a 508-compliant PDF.

5.6 – By the end of Month 4 in Option Period 2, the contractor shall submit to EPA a proposal to reorganize the content of the existing STEPL Users Guide. The TOCOR intends to provide complete feedback on this proposal within 30 days of receipt of this proposal. By the end of Month 9 in Option Period 2, the contractor shall provide a draft update to this guide.

The contractor shall expand the current guide beyond providing documentation of the model functionality and standard operating procedure for its users by also including the following in the expanded guide:

- an application guide with practical advice and/or examples on how to use the model for representing multiple BMP types in the same land use in parallel and in series;
- the content of the BMP definitions document (to eliminate the need for a separate file for this content);
- documentation of the computational logic and formulas used in STEPL;
- the more useful questions and solutions provided in the user support emails over the most recent five years or so, possibly in a Frequently Asked Questions (FAQs) section;
- documentation of “release notes” with the full history of each version of STEPL (i.e., what, when, and why was the version changed).

The TOCOR intends to provide written feedback to the contractor within 45 days of receiving the contractor's draft updated guide from subtask 5.7. The contractor shall finalize the updated guide by the end of Option Period 2.

TASK 6 – Support for Development of Web-based Version of STEPL Model

Under a previous task order (EP-C-12-055 Task Order #13), the development of a Web-based version of STEPL was started to meet the requirements in the list below, and this effort is currently continuing under another EPA contractor (Informantum and its subcontractor, Systalex, herein referred to as the Informantum team). Under this task, the contractor shall work with EPA and the Informantum team to deliver a web-based application that meets the requirements described below. Development of the web-based version and user interface will be conducted by the Informantum team with model-based support, data sourcing, model data or function updates, etc. provided by the contractor for this task order. EPA estimates that the development of this Web-based version will be 50% to 60% complete (by the Informantum team and previous efforts) by fall 2018.

Model Requirements for the Web-based version of STEPL:

1. The model shall be a public-facing web-based application that will run on EPA server space and will not be dependent on proprietary software.
2. The model shall meet or exceed the accuracy, spatial and temporal resolution, feature set and ease-of-use of the most current spreadsheet version of STEPL.
3. The model shall rely on the most up-to-date publicly available geodatasets used by the current spreadsheet version of STEPL and summarized at the HUC12 watershed scale, including NLDC land cover, STATSGO hydrologic soils group, USDA animal agriculture, septic system inventory and failure rates (based on national septic system surveys by the National Small Flows Clearinghouse). Geographic coverage of these data sets shall meet or exceed that of the most current spreadsheet version of STEPL.
4. The model shall rely on event-based hydrology with precipitation/storm event data at the county or sub-county level that meet or exceed the temporal and spatial resolution and length of record as the most current web-based prototype version of STEPL.
5. The model shall include on its front end a graphical user interface to facilitate users to supply model inputs for HUC12 scale modeling logically and intuitively, and this interface shall make available context-driven help for all required inputs. The model shall provide users with the ability to aggregate model input data by county boundary, HUC12 unit or a combination of these spatial layers. The user interface shall function practically with a variety of screen sizes common to desktop computers, laptops and tablets.
6. The model shall facilitate watershed selection by the user through interactive mapping, e.g., through a Web-based geoplatform or online mapping services. The GIS component of the model shall allow users to display, at their option, the following layers: street maps, aerial maps/images, NLCD land cover classifications, STATSGO hydrologic soils group data, HUC12 watershed boundaries, county and state boundaries and streams for all U.S. states and Puerto Rico.

7. The model shall have the ability to perform sediment erosion calculations based on the Modified Universal Soil Loss Equation (MUSLE) as a function of peak flow and runoff volume.
8. The model shall calculate sediment and other pollutant loads, including nitrogen and phosphorus loads, using surface runoff and event mean concentrations (EMC). The model shall incorporate placeholder fields to perform bacteria load calculations once BMP bacteria efficiency values and default event mean concentrations for land use categories are added to the model in a future upgrade.
9. The model shall summarize pollutant and sediment loadings to a long-term average annual value.
10. The model shall simulate the full set of BMPs that are simulated by the most current spreadsheet version of STEPL utilizing long-term average BMP efficiency values.
11. The model shall include a BMP Calculator utility to estimate combined efficiencies from multiple BMPs on the same land use type and this utility shall be integrated into the model itself (i.e., it shall not be a stand-alone utility).
12. The model shall facilitate at least three (3) user-supplied custom BMPs per model run, and more as technical and model capabilities allow.
13. The model shall facilitate editing of BMP efficiency values by users and shall provide context-driven help for recommended efficiency ranges.
14. The model shall facilitate the ability for a user to save a project (e.g., model input and output files) and quickly and intuitively edit saved input files for subsequent model runs.
15. The model shall include a reporting function that would generate a summary of load reduction results along with user inputs and other metadata. The output would produce a 1- to 2-page file suitable for incorporating into grantee progress reports as supporting documentation. The model user shall have the option to select any of the following output formats: Microsoft Word, CSV or PDF.

Where advantageous to EPA when developing the Web-based version of STEPL, the contractor shall make use of EPA's existing IT resources such as sharing database space with EPA's Section 319 Grants Reporting and Tracking System (GRTS) and mapping services. The contractor shall coordinate development and deployment of the model with EPA OW Project Management Office (PMO), EPA's GRTS contractors, and other offices as requirements and efficiencies warrant.

The Informentum team (EPA's current contractor for GRTS) specializes in developing and maintaining Oracle applications, such as GRTS, and is proficient with building Web-based application interfaces with Oracle APEX. The Informentum team is responsible for developing the data system structures and the Apex interface for the new application. The Informentum team has the schema, the Entity Relationship Diagram (ERD) and other documentation developed by the previous EPA contractor for STEPL support (Tetra Tech) that are needed to deliver a prototype web-based version of STEPL. Development of the web-based version and user interface will be conducted by the Informentum team with model-based support, data sourcing, model data or function updates, etc. provided by the contractor for this task order. The

contractor is needed to work with the Informentum team and EPA to ensure that the equations and formulas for the STEPL Web app are functioning properly and that the app meets all the requirements listed above. The equations and formulas for STEPL are available in Appendix E of [the STEPL version 4.4 User's Guide](#). Primarily, this means that the contractor for this task order shall provide rigorous testing and QA/QC checks to ensure the model is working properly, and shall contribute to developing all necessary model documentation.

6.1 – The contractor shall work with the Informentum team to produce an updated schedule with milestones and potential interim deliverables for advancing the critical-path development of a publicly available web-based model to run on EPA server space which meets the requirements specified above. The schedule shall be delivered within 3 weeks of finalization of the QAPP and may be revisited upon mutual written agreement between the TOCOR, the Informentum team, and the contractor. It is a goal of this task order to complete the development of a beta version of the Web-based STEPL model that meets the requirements stated above by the end of Month 8 of the base period.

6.2 – The contractor shall support EPA in testing and deployment of the model on EPA public server space, to include assisting EPA and the Informentum team in the agency's Application Deployment Checklist (ADC) process for delivery of the Web-based version of STEPL to EPA, if necessary.

6.3 – Prior to the public release of the beta version of the Web-based STEPL model, the contractor shall work with the Informentum team to develop and deliver to the TOCOR documentation of the model's internal architecture and component interrelationships and a draft user's manual, both in Microsoft Word format. The contractor shall also work with Systalex to deliver the draft user's manual in web-ready 508-compliant PDF format.

6.4 – EPA will set aside the first 60 days following the model's public deployment as a beta testing period. Comments received by or from EPA during this period shall be jointly reviewed by the contractor and EPA technical staff and sorted by priority and ease-of-fix. The contractor shall support EPA and the Informentum team in troubleshooting and correcting any deficiencies that prevent the proper execution, calculation or use of the model as defined by the requirements specified above. Any comments received by EPA or the contractor that fall outside the scope defined in the list of requirements may be considered as potential future model enhancements for future work under a separate contract or task order modification. The contractor shall work with the Informentum team to provide fixes to the beta version of the model by way of delivering a final working version of the model within 45 days of TOCOR's delivery of the list of fixes necessary to meet the model requirements specified above. The targeted completion date of this task is by the end of the base period.

6.5 – By the end of the base period, the contractor shall work with EPA and the Informentum team to finalize the documentation following completion of the public beta testing period and any fixes to bugs identified in the beta model. The contractor shall work with the Informentum team to deliver the final user's manual in Word format and as a web-ready 508-compliant PDF format on or before the contractor and the Informentum team deliver the final Web-based version of STEPL (initial release).

6.6 – The contractor shall work with the TOCOR and the Informentum team to support delivery of a prioritized list of enhancements to be determined at a later date. The contractor shall work with the TOCOR to develop a schedule for each major enhancement proposed. The schedule shall be revisited approximately every 6 months. The contractor shall set aside 40 hours of LOE for this subtask in the base period and 120 hours for subsequent option periods.

C. SCHEDULE OF BENCHMARKS & DELIVERABLES:

BASE PERIOD:

Task No.	BENCHMARK/DELIVERABLE	Schedule
1.1	Draft QAPP for EPA review and approval.	Within 7 business days after task order Award.
1.2	Final QAPP, incorporating EPA comments into revisions for EPA approval.	Within 6 business days of receipt of the written comments from EPA on the draft QAPP.
1.3	Provide written documentation of QA/QC activities performed for each major deliverable.	With each major deliverable (noted by †).
1.4	Written status reports of QA activities.	Monthly (may be combined with Task 2.3 deliverable).
1.5	Revise QAPP if necessary.	Draft revised QAPP within 7 business days after receiving written technical direction; finalize revised QAPP 6 business days after receiving comments from EPA.
2.1	Kickoff meeting for task order.	Within 10 business days of task order award.
2.2	Status discussions with TOCOR and written summaries.	Monthly or as needed (less than monthly requires TOCOR approval); draft summaries provided within 5 business days of each discussion; final summaries provided within 5 days from any TOCOR comments provided.
2.3	Written progress reports.	Monthly.

2.4	Notification to TOCOR of problems, delays or questions, including QA problems.	ASAP, but not later than 3 business days of discovery of problems, delays or questions. If notifying by phone or other non-written means, send follow-up email within 3 more business days.
2.5	Draft deliverables and any associated working materials needed for the completion of this work.	Prior to the expiration date of this task order.
3.1	Respond to each technical question sent to the Help Desk email box and phone support.	Ongoing monitoring of Help Desk; respond to questions within three business days.
3.2	a) Provide a list of staff assigned to co-administer EPA's STEPL discussion list; b) monitor list; c) provide ongoing technical support for the list.	a) Within five business days from the start of this task order; b) daily; c) as needed, but not later than 3 business days from request for support.
4.1	Integrate the functions of the separate BMP calculator tool into STEPL's <i>CombinedBMPEfficiency</i> worksheet	Deliver beta by the end of Month 4; deliver final version within 30 days of receiving EPA feedback.
4.2	Improve Run Solver functionality in STEPL's Combined BMP Calculator. [†]	Deliver beta by the end of Month 7; finalize improvements within 30 days of receiving EPA's feedback.
4.3	Update the Region 5 Model to include all of the default BMP types available in STEPL version 4.4; document the outcome of the decision; update the fact sheet for the Region 5 Model. [†]	By the end of Month 6.
4.4	Lead coordination and provide technical support for improving the load reduction efficiency values used by STEPL. At TOCOR's option, produce a draft and final report. [†]	Ongoing coordination and support as determined by the contractor. At TOCOR's option, produce draft & final reports according to mutually agreed-to schedule, but produce draft within 5 months of TOCOR's request and final within 30 days of receiving feedback.
4.5	At the TOCOR's option, assist application of standardized procedure to determine load reduction efficiency values for BMPs in STEPL. [†]	Within 6 months of the date of this request (per BMP/land use category); may extend beyond base period.

4.6	Update STEPL & BMP Calculator with EPA-approved recommendations from Tasks 4.1– 4.4 and bug fixes uncovered thru first 10 months; update model documentation and Help files. †	By the end of the base period.
4.7	Update STEPL to make it compatible with the latest public version of Microsoft Excel. †	By the end of the base period.
5.1	Conduct 1-2 webinar trainings on STEPL. †	By the end of the base period; additional milestones provided in narrative.
5.2	Conduct up to one live training on STEPL. †	By the end of the base period; additional milestones provided in narrative.
5.3	Review, reorganize and update the BMP Definitions file for STEPL and the Region 5 Model. †	Produce draft document by end of Month 6; finalize document within 3 weeks of receiving feedback from TOCOR.
5.4	Assist EPA to migrate the current website for STEPL and the Region 5 Model to EPA server space. †	As needed.
6.1	Work with EPA and the Informentum team to produce schedule for developing web-based version of STEPL and all necessary model documentation; ensure that the equations and formulas for the STEPL Web app are functioning properly and that the app meets all the requirements by providing rigorous testing and QA/QC checks to ensure the model is working properly; contribute to model documentation.	Produce schedule within 3 weeks of finalization of QAPP to complete the development of a beta version of Web-based STEPL by the end of Month 9 of the base period; assist Web app model development team as needed.
6.2	Support EPA in testing and deployment of the model on EPA public server space. †	As needed.
6.3	Work with the Informentum team to develop documentation of the model's internal architecture and component interrelationships and a draft user's manual. †	By the end of Month 8 of the base period.

6.4	Support EPA and the Informentum team in troubleshooting & correcting deficiencies that arose from the beta release of the Web-based version of STEPL. †	By the end of the base period.
6.5	Work with EPA & the Informentum team to finalize documentation developed in Task 6.3 †	By the end of the base period.

OPTION PERIOD 1:

Task No.	BENCHMARK/DELIVERABLE	Schedule
1.3	Discussion of QA/QC activities performed for each major deliverable.	With each major deliverable (noted by †).
1.4	Written status reports of QA activities.	Monthly (may be combined with Task 2.3 deliverable).
1.5	Revise QAPP if necessary.	Draft revised QAPP within 7 business days after receiving written technical direction; finalize revised QAPP 6 business days after receiving comments from EPA.
2.1	Kickoff meeting for option period.	Within 10 business days of start of option period.
2.2	Status discussions with TOCOR and written summaries.	Monthly or as needed (less than monthly requires TOCOR approval); draft summaries provided within 5 business days of each discussion; final summaries provided within 5 days from any TOCOR comments provided.
2.3	Written progress reports.	Monthly.
2.4	Notification to TOCOR of problems, delays or questions, including QA problems.	ASAP, but not later than 3 business days of discovery of problems, delays or questions. If notifying by phone or other non-written means, send follow-up email within 3 more business days.
2.5	Draft deliverables and any associated working materials needed for the completion of this work.	Prior to the expiration date of this task order.
3.1	Respond to each technical question sent to the Help Desk email box and phone support.	Ongoing monitoring of Help Desk; respond to questions within three business days.

3.2	a) monitor list; b) provide ongoing technical support for the list.	a) daily; b) as needed, but not later than 3 business days from request for support.
4.5	At the TOCOR's technical direction, assist application of standardized procedure to determine load reduction efficiency values for BMPs in STEPL. †	Within 6 months of the date of this request (per BMP/land use category), at TOCOR's option.
4.7	Update STEPL to make it compatible with the latest public version of Microsoft Excel. †	By the end of the option period.
4.8	Review the list of BMPs in STEPL against the BMP list in GRTS & recommend possible additions and deletions to STEPL.	By the end of Month 6 in Option Period 1.
4.9	Develop a white paper on enhancing STEPL to model bacteria. †	By the end of Option Period 1.
5.1	Conduct 1-2 webinar trainings on STEPL. †	By the end of the option period; additional milestones provided in narrative.
5.2	Conduct up to one live training on STEPL. †	By the end of the option period; additional milestones provided in narrative.
5.5	Produce a draft & final user's guide for the Region 5 Model. †	Produce draft guide by the end of Month 6 of Option Period 1; finalize guide within 30 days of receiving final feedback from the TOCOR.
6.6	Work with the TOCOR and the Inforum team to support delivery of a prioritized list of enhancements †; produce schedule.	Update schedule for supporting the delivery of prioritized list of enhancements of Web-based STEPL app by end of Month 6 and again at end Option Period; provide support in accordance with updated schedule.

OPTION PERIOD 2:

Task No.	BENCHMARK/DELIVERABLE	Schedule
1.3	Discussion of QA/QC activities performed for each major deliverable.	With each major deliverable (noted by †).
1.4	Written status reports of QA activities.	Monthly (may be combined with Task 2.3 deliverable).

1.5	Revise QAPP if necessary.	Draft revised QAPP within 7 business days after receiving written technical direction; finalize revised QAPP 6 business days after receiving comments from EPA.
2.1	Kickoff meeting for option period.	Within 10 business days of start of option period.
2.2	Status discussions with TOCOR and written summaries.	Monthly or as needed (less than monthly requires TOCOR approval); draft summaries provided within 5 business days of each discussion; final summaries provided within 5 days from any TOCOR comments provided.
2.3	Written progress reports.	Monthly.
2.4	Notification to TOCOR of problems, delays or questions, including QA problems.	ASAP, but not later than 3 business days of discovery of problems, delays or questions. If notifying by phone or other non-written means, send follow-up email within 3 more business days.
2.5	Draft deliverables and any associated working materials needed for the completion of this work.	Prior to the expiration date of this task order.
3.1	Respond to each technical question sent to the Help Desk email box and phone support.	Ongoing monitoring of Help Desk; respond to questions within three business days.
3.2	a) monitor list; b) provide ongoing technical support for the list.	a) daily; b) as needed, but not later than 3 business days from request for support.
4.5	At the TOCOR's technical direction, assist application of standardized procedure to determine load reduction efficiency values for BMPs in STEPL. †	Within 6 months of the date of this request (per BMP/land use category), at TOCOR's option.
4.7	Update STEPL to make it compatible with the latest public version of Microsoft Excel. †	By the end of the option period, as necessary.
5.1	Conduct 1-2 webinar trainings on STEPL. †	By the end of the option period; additional milestones provided in narrative.
5.2	Conduct up to one live training on STEPL. †	By the end of the option period; additional milestones provided in narrative.

5.6	a) Submit proposal to reorganize the content of the existing STEPL Users Guide; b) produce a draft update; c) finalize update. †	a) by the end of Month 4 in Option Period 2; b) by the end of Month 9 in Option Period 2; c) by the end of Option Period 2.
6.6	Work with the TOCOR and the Informentum team to support delivery of a prioritized list of enhancements †; produce schedule.	Update schedule for supporting the delivery of prioritized list of enhancements of Web-based STEPL app by end of Month 6 and again at end Option Period; provide support in accordance with updated schedule.

OPTION PERIOD 3:

Task No.	BENCHMARK/DELIVERABLE	Schedule
1.3	Discussion of QA/QC activities performed for each major deliverable.	With each major deliverable (noted by †).
1.4	Written status reports of QA activities.	Monthly (may be combined with Task 2.3 deliverable).
1.5	Revise QAPP if necessary.	Draft revised QAPP within 7 business days after receiving written technical direction; finalize revised QAPP 6 business days after receiving comments from EPA.
2.1	Kickoff meeting for option period.	Within 10 business days of start of option period.
2.2	Status discussions with TOCOR and written summaries.	Monthly or as needed (less than monthly requires TOCOR approval); draft summaries provided within 5 business days of each discussion; final summaries provided within 5 days from any TOCOR comments provided.
2.3	Written progress reports.	Monthly.
2.4	Notification to TOCOR of problems, delays or questions, including QA problems.	ASAP, but not later than 3 business days of discovery of problems, delays or questions. If notifying by phone or other non-written means, send follow-up email within 3 more business days.
2.5	Draft deliverables and any associated working materials needed for the completion of this work.	Prior to the expiration date of this task order.
3.1	Respond to each technical question sent to the Help Desk email box and phone support.	Ongoing monitoring of Help Desk; respond to questions within three business days.

3.2	a) monitor list; b) provide ongoing technical support for the list.	a) daily; b) as needed, but not later than 3 business days from request for support.
4.5	At the TOCOR's technical direction, assist application of standardized procedure to determine load reduction efficiency values for BMPs in STEPL. †	Within 6 months of the date of this request (per BMP/land use category), at TOCOR's option.
4.7	Update STEPL to make it compatible with the latest public version of Microsoft Excel. †	By the end of the option period, as necessary.
5.1	Conduct 1-2 webinar trainings on STEPL. †	By the end of the option period; additional milestones provided in narrative.
5.2	Conduct up to one live training on STEPL. †	By the end of the option period; additional milestones provided in narrative.
6.6	Work with the TOCOR and the Informentum team to support delivery of a prioritized list of enhancements †; produce schedule.	Update schedule for supporting the delivery of prioritized list of enhancements of Web-based STEPL app by end of Month 6 and again at end Option Period; provide support in accordance with updated schedule.

OPTION PERIOD 4:

Task No.	BENCHMARK/DELIVERABLE	Schedule
1.3	Discussion of QA/QC activities performed for each major deliverable.	With each major deliverable (noted by †).
1.4	Written status reports of QA activities.	Monthly (may be combined with Task 2.3 deliverable).
1.5	Revise QAPP if necessary.	Draft revised QAPP within 7 business days after receiving written technical direction; finalize revised QAPP 6 business days after receiving comments from EPA.
2.1	Kickoff meeting for option period.	Within 10 business days of start of option period.
2.2	Status discussions with TOCOR and written summaries.	Monthly or as needed (less than monthly requires TOCOR approval); draft summaries provided within 5 business days of each discussion; final summaries provided within 5 days from any TOCOR comments provided.
2.3	Written progress reports.	Monthly.

2.4	Notification to TOCOR of problems, delays or questions, including QA problems.	ASAP, but not later than 3 business days of discovery of problems, delays or questions. If notifying by phone or other non-written means, send follow-up email within 3 more business days.
2.5	Draft deliverables and any associated working materials needed for the completion of this work.	Prior to the expiration date of this task order.
3.1	Respond to each technical question sent to the Help Desk email box and phone support.	Ongoing monitoring of Help Desk; respond to questions within three business days.
3.2	a) monitor list; b) provide ongoing technical support for the list.	a) daily; b) as needed, but not later than 3 business days from request for support.
4.5	At the TOCOR's technical direction, assist application of standardized procedure to determine load reduction efficiency values for BMPs in STEPL. †	Within 6 months of the date of this request (per BMP/land use category), at TOCOR's option.
4.7	Update STEPL to make it compatible with the latest public version of Microsoft Excel. †	By the end of the option period, as necessary.
5.1	Conduct 1-2 webinar trainings on STEPL. †	By the end of the option period; additional milestones provided in narrative.
5.2	Conduct up to one live training on STEPL. †	By the end of the option period; additional milestones provided in narrative.
5.6	a) Submit proposal to reorganize the content of the existing STEPL Users Guide; b) produce a draft update; c) finalize update. †	a) by the end of Month 4 in Option Period 2; b) by the end of Month 9 in Option Period 2; c) by the end of Option Period 2.
6.6	Work with the TOCOR and the Informentum team to support delivery of a prioritized list of enhancements †; produce schedule.	Update schedule for supporting the delivery of prioritized list of enhancements of Web-based STEPL app by end of Month 6 and again at end Option Period; provide support in accordance with updated schedule.

D. REPORTING

All documentation and reporting under this Task Order shall be in compliance with contract requirements. See contract clause F.2, F.3, and J.2 "List of Attachments, Number 2 - Reports of Work".

Requirements specific to this Task Order are as follows (See Task 2.3):

The contractor shall provide a summation of the customer support and other activities performed during the appropriate month. The summary shall include, but not be limited to, the number of customers assisted along with associated organization (state, region, public, etc), and generalized types of customer support offered. The contractor shall also provide any challenges met in providing customer support during the appropriate month. In addition, the contractor shall identify QA activities performed to support implementation of this Task Order, problems encountered, deviations from the QMP, QAPP, SOPs, checklists, or other QA guidance, and corrective actions taken.

E. KEY PERSONNEL

(a) The Contractor shall assign to this contract the following key personnel:

- Task Order Leader / Project Manager
- Technical Lead for Model Development and Support

(b) During the first ninety (90) days of performance, the contractor shall make no substitutions of key personnel unless the substitution is necessitated by illness, death, or termination of employment. The contractor shall notify the Contracting Officer within 15 calendar days after the occurrence of any of these events and provide the information required by paragraph (c) of this clause. After the initial 90-day period, the contractor shall submit the information required by paragraph (c) to the Contracting Officer at least 15 days prior to making any permanent substitutions.

(c) The contractor shall provide a detailed explanation of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutes, and any additional information requested by the Contracting Officer. Proposed substitutes should have comparable qualifications to those of the persons being replaced. The TOCOR will notify the contractor within 15 calendar days after receipt of all required information of the decision on substitutions.

F. CONTRACTOR IDENTIFICATION

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative.

The contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the Task Order Manager.

G. TRAVEL

All performance, documentation and reporting of Contractor Travel under this task order shall be in compliance with contract requirements. Reference Contract Clause “Approval of Contractor Travel”

H. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS

No single event under this task order is anticipated to incur \$20,000 or more in cost. The contractor shall immediately notify the EPA Contracting Officer, PO and TOCOR of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

I. VALIDATION OF TASK ORDER DELIVERABLES FOR SECTION 508 COMPLIANCE

The contractor shall support the TOCOR in conducting a “Final Deliverable Validation” to ensure compliance with Section 508 and the Federal Acquisition Regulations (FAR) related to “electronic and information technology (EIT) deliverables.” The contractor shall furnish certification, in writing, to the TOCOR that the contractor has complied with EPAAR Clause 1552.211-79 “Compliance with EPA Policies for Information Resources Management” (Reference Contract Clause C-1), including the requirement that all electronic and information technology (EIT) deliverables be Section 508 compliant in accordance with the policies referenced at www.epa.gov/accessibility. Reference Contract Clause – 1 (c) and Attachment 1, PWS, Section 2.5.3.4, 3.7, and 4.3.7.

J. QUALITY ASSURANCE SURVEILLANCE PLAN

Per contract requirements.

K. NOTIFICATION OF COMPLETION OF TASK ORDER DELIVERABLES

In the event that the task order reaches 30 days prior to the end of the period of performance in a given period and the contractor assesses that the deliverables will not be able to be completed, the contractor shall notify the TOCOR and the CO immediately. Within 5 business days of said notification, the TOCOR, in coordination with the CO, will provide written technical direction concerning use of the remaining funding to prepare draft deliverables, interim work products, and any necessary working files in an electronic format which is supported by EPA.

L. ATTACHMENTS:

This section provides additional detailed project background or other necessary reference materials for contractor performance.

There are no attachments to this PWS.

1552.217-71 OPTION TO EXTEND THE TERM OF THE CONTRACT-COST-TYPE CONTRACT (APR 1984)

The Government has the option to extend the term of this contract for four (4) additional period(s). If more than 30 days remain in the contract period of performance, the Government, without prior written notification, may exercise this option by issuing a contract modification. To exercise this option within the last 30 days of the period of performance, the Government must provide to the Contractor written notification prior to that last 30-days of the period. This preliminary notification does not commit the Government to exercising the option. Use of an option will result in the following contract modifications:

(a) The "Period of Performance" clause will be amended to cover a base period and option periods:

	Period Start Date	End Date
/Base Period	Award	–08/02/2019
Option Period 1	08/03/2019	– 08/02/2020
Option Period 2	08/03/2020	– 08/02/2021
Option Period 3	08/03/2021	– 08/02/2022
Option Period 4	08/03/2022	– 08/02/2023

(b) Paragraph (a) of the "Level of Effort" clause will be amended to reflect a new and separate level of effort of:

Period	Level of Effort
Base Period	748
Option Period 1	576
Option Period 2	576
Option Period 3	576
Option Period 4	576

(c) The "Estimated Cost and Fixed Fee" clause will be amended to reflect increased estimated costs and fixed fee for each option period as follows:

Period	Estimated Cost	Fixed Fee	Total CPFF
Option Period 1	TBD	TBD	TBD
Option Period 2	TBD	TBD	TBD
Option Period 3	TBD	TBD	TBD
Option Period 4	TBD	TBD	TBD

(d) If the contract contains "not to exceed amounts" for elements of other direct costs (ODC), those amounts will be increased as follows: N/A

LOCAL CLAUSES EPA-B-32-101 LIMITATION OF FUNDS NOTICE

(a) Pursuant to the Limitation of Funds clause, incremental funding in the amount of **\$TBD** is allotted to cover estimated cost. Funding in the amount of **\$TBD** is provided to cover the corresponding increment of base fee. The amount allotted for costs is estimated to cover the contractor's performance through **TBD**

(b) When the contract is fully funded (i.e. the sum of the total estimated cost, base fee, award fee pool available for award, and award fee awarded, as set forth in the schedule of this contract), the Limitation of Cost clause shall become applicable.

(c) Recapitulation of Funds

LOCAL CLAUSES EPA-B-16-102 ESTIMATED COST AND FIXED FEE

- (a) The estimated cost of this contract is **TBD**
- (b) The fixed fee **TBD**
- (c) The total estimated cost and fixed fee is **TBD**

LOCAL CLAUSE EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES

Task Order Contracting Officers Representatives (CORs)/Project Officers for this contract are as follows:

Task Order COR (TOCOR): Don Waye, waye.don@epa.gov

Alternate Task Order COR (Alt TOCOR): Cynthia Curtis, curtis.cynthia@epa.gov

Contracting Officials responsible for administering this contract are as follows:

Contracting Officer

Angela Lower, US EPA. Cincinnati Procurement Operations Division, 26 W MLK Dr MS W136A, Cincinnati, Ohio 45268 lower.angela@epa.gov

Contracts Specialist

Lisa Mitchell-Flinn, US EPA. Cincinnati Procurement Operations Division, 26 W MLK Dr MS W136A, Cincinnati, Ohio 45268 lower.angela@epa.gov

COST PROPOSAL INSTRUCTIONS
TASK ORDER SOLICITATION PR-OW-18-00419

The following paragraphs supplement the instructions set forth in the contract clause B-1 "Ordering Procedures". These instructions apply to the prime contractor as well as subcontractors and consultants. It is the prime contractor's responsibility to ensure that all instructions are disseminated to subcontractors and consultants.

Contractors shall submit a summary page for the base and any optional periods. The summary sheet shall be supplemented as necessary to provide thoroughness and clarity in the data presented. Pricing detail shall be included by task for the base and any optional periods. The cost breakdown supporting the above documents shall be breakout the following elements: Direct Labor, including direct labor rate and hours for each proposed individual, Fringe Benefits, Overhead, ODC, Travel, Consultants, Subcontractors, Total Subcontract, Subtotal, G&A, Total Cost, Fee, Total Cost Plus Fee. This cost detail shall be broken out for the base and any optional periods, at the task level. A copy of the cost proposal shall be included in the submission in MS Excel. This copy shall include formulas used to arrive at the CPFF for the base and any optional periods and aggregate totals for the base and optional periods for each element.

When subcontract effort is included in the cost proposal, the prime contractor shall submit charts for each period and for the aggregate (all years, all hours) which clearly indicate the exact allocation of the specified level of effort among the prime contractor and the proposed subcontractors. Specified labor categories as well as job titles within the labor categories should be identified. Subcontractor detail may be provided by the subcontractor directly to the EPA.

If a proposed subcontractor does not have an approved accounting system (one that is considered adequate for use on Government cost-type contracts), the Contracting Officer's consent for a cost type (CPFF, etc.) subcontract will not be granted.

In the cost proposal, the contractor must certify that all proposed personnel (including proposed subcontractor personnel or consultants) for the Professional Level identified by the contractor meet the qualifications specified in the TSAWP IDIQ Contract Attachment 3, "Definition of Labor Classifications."

TASK ORDER SOLICITATION TECHNICAL EVALUATION
For PR-OW-18-00419:
Technical Support for Nonpoint Source Load Reduction Models

Contractors shall limit their responses to 18 pages or less, with no smaller than 11-point Calibri or Arial font (not Arial Narrow) and 1 inch margins, using their discretion on which criteria to place emphasis. Resumes for up to 5 team members may be included above the page limitation; with each resume not to exceed 2 pages. Any transmittal letter and cover page is also excluded from the page limitation. Proposals will be evaluated on the criteria listed below by the project Technical Evaluation Panel and will be assigned a score from 0-3 using the scale listed below. Award will be based on Best Value Tradeoffs basis where Technical Quality is more important than Cost.

RATING SCALE

The following rating scale will be used in scoring proposals:

Unacceptable = 0. Criteria is not addressed.

Poor = 1. The proposal fails to adequately address critical requirements of the PWS and technical evaluation criteria; may satisfy some requirements, but not others; reflects major weaknesses or deficiencies; could not meet requirements without fundamental changes involving a total re-write or redirection of the offer.

Satisfactory = 2. Proposal addresses and meets most requirements of the PWS and technical evaluation criteria, with some correctable and minor weaknesses and/or deficiencies noted; is generally considered to demonstrate at least minimum requisite experience, qualifications and performance capabilities. Some discussions may be required to address and correct weaknesses or deficiencies.

Superior = 3. The proposal clearly addresses and exceeds requirements of the SOW and technical evaluation criteria with no weaknesses or deficiencies, or very minor, correctable weaknesses or deficiencies noted.

Each point is worth 1/3 of the weight assigned to an individual criterion.

The following criteria and weights will be used in the technical evaluation of Task Order proposals:

CRITERIA

Technical Approach (45 points)

This criterion will evaluate the contractor's technical approach for the development and performance of tasks 3 through 6 requested in the PWS with the required attention to quality assurance/quality control and overall project communications described in the first two tasks. The contractor shall demonstrate an understanding of the work to be performed, and demonstrate the appropriate knowledge, capability (availability of appropriate staff, equipment, and resources), and ability to complete the tasks on time. The contractor shall also demonstrate an understanding of the typical problems encountered in performing services required by the solicitation and the ability to present practical, efficient solutions for those problems. The contractor's proposal shall include a clear, concise narrative that addresses each of the areas identified under the criteria.

Key Personnel (30 points)

This criterion evaluates the technical qualifications (experience, expertise, and education) and availability of the proposed key personnel. The contractor's proposal should describe the technical qualifications (experience, expertise, and education) and availability of the proposed Key Personnel as related to the tasks set forth in the PWS for the following roles:

- A. **Project Manager (P3 or higher)** — Demonstrated qualifications (experience, expertise, education) and availability in managing projects of similar size, type, and scope to that specified in the PWS, including experience managing people and concurrent wide-ranging tasks, with an emphasis on utilizing communication mechanisms to ensure effective coordination and timely management of activities of similar size, type, and scope to that specified in the PWS. **(15 points)**
- B. **Technical Lead for Model Development and Support (P3 or higher)** — Demonstrated qualifications (experience, expertise, education) and availability in developing, testing and troubleshooting spreadsheet-based water quality models and providing user support and training for such models. **(15 points)**

The information provided by the contractor should clearly establish the individual's educational achievements, specific past experience in performing similar projects to those anticipated under the solicitation, including relevant publications, specific role held by the proposed individual in projects cited, length of time he or she held that role, goals met and achievements in the role, and availability for effort on work anticipated herein, including commitment letters if not currently an employee of the prime or subcontractor. Note that individuals proposed as Key Personnel will be listed as such in the Task Order. At a minimum, provide the individual's resume (limited to 2 pages per role; an individual may be listed for up to two roles), including the following items in a simple, systematic table format or listing:

- a. Name, Professional Level, Job Title, and Proposed Role(s) under the task order.
- b. Percent of time available for the contract and commitment letter if not already an employee of the prime or subcontractor.

- c. Degree(s) held and corresponding field of study.
- d. * Specific project experience related to the PWS area of responsibility.
- e. Job responsibility and goals met for project experience described in item d.
- f. Time dedicated to each project in item d.
- g. Beginning and ending dates of each project in item d.
- h. Current project commitments, including percent of time for each project, and duration of each project.

* It is not sufficient to merely state that an individual worked on a project. Explain what he/she did and its relevance to the requirements outlined in the PWS.

Corporate Technical Experience (25 points)

This criterion evaluates demonstrated corporate experience in fulfilling the technical requirements of contracts/subcontracts/projects similar in technical scope to this solicitation. Of particular interest is the offeror's technical experience conducting work similar to that under tasks 3 through 6 of the PWS. In describing corporate experience, include (a) a description of the contract/task order/project, (b) the sponsor, (c) the dates of performance, (d) the specific role the offeror assumed in the overall performance (e.g., prime, subcontractor or consultant), (e) relevance of the experience to the requirements in the PWS of this Task Order, and any other information that would serve to establish the offerors' demonstrated corporate technical experience in fulfilling the technical requirements of contracts similar in technical scope to this task order. Report only those projects completed within the past five years, and projects that are ongoing.